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Claims

1. A diamine compound containing a triazine moiety, represented by Formula 1 below:

NH₂

A

NH₂

NH₂

wherein A is a direct bond, -O- or -COO-; B is a direct bond, -O-, -COO-, -CONH- or -OCO-; and C is a $C_{1\sim30}$ linear, branched or cyclic monovalent organic group, or a combined form thereof.

(1)

2. The diamine compound according to claim 1, wherein the substituent C in Formula 1 is a linear or branched aliphatic hydrocarbon group, a saturated cyclic hydrocarbon group, a cyclic hydrocarbon group containing at least one carbon-carbon double bond, or a fused saturated or unsaturated cyclic hydrocarbon group which is unsubstituted or substituted with at least one group selected from the group consisting of -H, -CH₃, -CF₃, -F, -Br, -Cl, -CN, -OH and -NO₂; or a group selected from the following groups:

$$-\bigcirc -\infty -\bigcirc x_{x_{i}}^{x_{i}} -\bigcirc -\bigcirc x_{x_{i}}^{x_{i}} -\bigcirc -\bigcirc x_{x_{i}}^{x_{i}} -\bigcirc -\bigcirc -\bigcirc x_{x_{i}}^{x_{i}}$$

$$-\bigcirc -\bigcirc x_{x_{i}}^{x_{i}} \text{ and } -\bigcirc -\bigcirc x_{x_{i}}^{x_{i}}$$

wherein X_1 and X_2 are each independently -H, -CH₃, -CF₃, -F, -Br, -Cl, -CN, -OH, or -NO₂.

3. A polyamic acid prepared by reacting a diamine component (a) and an acid dianhydride (b), the diamine component including 0.1 mole% or above of the diamine compound according to claim 1 or 2 based on 100 mole% of the diamine component, and the polyamic acid having a repeating unit represented by Formula 2

below:

wherein x is a tetravalent aromatic or alicyclic organic group, and z is a divalent organic group originating from the diamine compound of Formula 1 or a divalent organic group originating from an aromatic or polysiloxane-based diamine.

4. The polyamic acid according to claim 3, wherein the diamine component (a) further includes an aromatic diamine compound and a polysiloxane-based diamine compound represented by Formulae 3 and 4 below, respectively:

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$$\mathbf{H}_{2}\mathbf{N} - \mathbf{R}_{5} = \begin{bmatrix} \mathbf{R}_{1} \\ \mathbf{S}_{3} \end{bmatrix} - \mathbf{O} - \begin{bmatrix} \mathbf{R}_{2} \\ \mathbf{S}_{1} \end{bmatrix} - \mathbf{R}_{6} - \mathbf{N}\mathbf{H}_{2}$$

$$\mathbf{R}_{3} = \begin{bmatrix} \mathbf{R}_{1} \\ \mathbf{R}_{3} \end{bmatrix} - \mathbf{R}_{4}$$

$$(4)$$

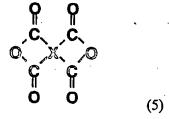
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- wherein R_1 , R_2 , R_3 and R_4 are each independently a $C_{1\sim 10}$ alkyl, alkoxy or aryl group, and R_5 and R_6 are each independently a $C_{1\sim 10}$ alkylene group.
- 5. The polyamic acid according to claim 4, wherein the substituent Y in Formula 3 is a divalent organic group selected from the group consisting of the following groups:

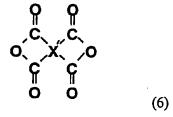
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6. The polyamic acid according to claim 3, wherein the acid dianhydride component (b) is an aromatic cyclic acid dianhydride represented by Formula 5 below:



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wherein X is a tetravalent aromatic cyclic organic group; an alicyclic acid dianhydride represented by Formula 6 below:



wherein X' is a tetravalent alicyclic organic group; or a mixture thereof, the mixing molar ratio of the aromatic cyclic acid dianhydride to the alicyclic acid dianhydride being between 1:99 and 99:1.

7. The polyamic acid according to claim 6, wherein the substituent X in Formula 5 is a group selected from the following groups:

and

the substituent X' in Formula 6 is a group selected from the following groups:

wherein X_1 , X_2 , X_3 and X_4 are each independently -H, -CH₃, -CF₃, -F, -Br, -Cl, -CN, -OH or -NO₂.

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- 8. The polyamic acid according to claim 3, wherein the polyamic acid has a number average molecular weight ranging from 10,000 to 500,000 g/mol.
- 9. A liquid crystal aligning agent comprising the polyamic acid according to claim 3.
 - 10. A liquid crystal alignment film produced by coating the liquid crystal aligning agent according to claim 9 onto a substrate, and entirely or partly imidizing the coating.

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11. A liquid crystal display device comprising the liquid crystal alignment film according to claim 10.